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# Progress in the Development of Rural Primary Care Clinics in West Virginia

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WEST VIRGINIA has made outstanding progress in developing a network of nonprofit primary care clinics to serve the needs of its predominantly rural population. Of the 63 clinics in existence today, 54 have been developed within the past 8 years. These clinics are a major health resource, since 26 percent of all rural primary care physicians within the State are prac-

ticing from these clinics. Our purpose here is to identify and explain important factors in the development of this network of West Virginia's primary care clinics.

The Office of Health Services Research, West Virginia University School of Medicine, has inventoried the clinics and developed a working definition of the health facility as "a not-for-profit medical service unit offering the services of a general practitioner or one of the primary care specialties such as pediatrics, general internal medicine, family practice or ob/gyn, for a minimum of 8 hours a week from a fixed location." Excluded from this definition are hospital emergency services, public health departments and their traditional clinics and mobile units, and units that are operated primarily for teaching purposes. Multispecialty groups that offer some primary care are excluded, whereas their exten-

sions that provide predominantly primary care are included in the inventory of primary care facilities.

Although the clinics are not defined on a rural or urban basis, their goal is to meet the medical needs of the predominantly rural population of West Virginia. A rural community is a population composed of less than 2,500 people. This definition is taken from the 1970 census user dictionary, which states: "urban places include all incorporated places of 2,500 or more," a rural population is "that population which is not classified as urban."

The extent of West Virginia's rurality is a factor both in the problems and opportunities for primary care development in the State. Since 1950, the rurality of both West Virginia and the nation as a whole has decreased. There has been, however, a disproport-

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tionate rate of change from rural to urban between West Virginia and the United States (fig. 1). West Virginia had been 1.8 times as rural as the rest of the nation; in 1970, it was 2.3 times as rural. The nation is urbanizing more than twice as fast as West Virginia.

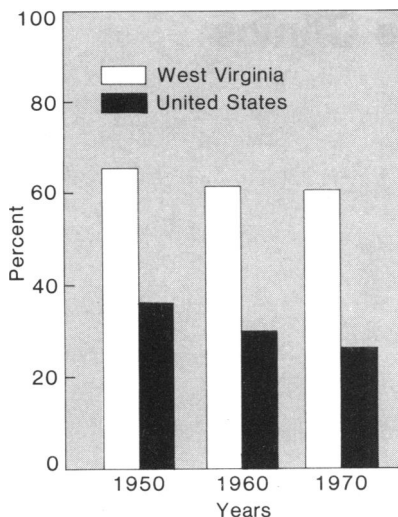
### Factors in Progress

Before January 1, 1972, nine primary care clinics were in operation throughout the State (fig. 2). Seven of the nine were established with the support of the United Mine Workers of America (UMWA) Health and Retirement Funds; the West Union Clinic was sponsored by the Sears and Roebuck Foundation; the Pennsboro Clinic was a community initiative. No Federal or State funds were used to develop any of these nine clinics.

As of August 1978, 63 clinics were in operation—an increase of 54 clinics since January 1972—and 9 more were in various stages of planning (fig. 3). An estimated 16 percent of all rural West Virginians are now within 15 minutes of one of these primary care clinics, and 26 percent of all primary care physicians practicing in rural West Virginia are now a part of the nonprofit clinic system.

Five major factors that have contributed to West Virginia's status as a national leader in the provision of primary medical services for its rural population are: (a) UMWA Health and Retirement Funds, (b) an informal coalition for primary care development, consisting of the Regional Medical Program, of the Appalachian Region Commission activities funded through the Office of the Governor, and of the Claude Worthington Benedum Foundation, (c) National Health Service Corps (NHSC)-Foreign Medical Graduates (FMGs), (d) Department of Health, Education, and Welfare,

Figure 1. Rural population, percentage in United States and West Virginia, 1950-70



Region III, and (e) evolving rural clinic management systems.

The UMWA Health and Retirement Funds has been a dominant factor in the development of nonprofit, primary care clinics. UMWA funds has a heritage of advocacy for development. As noted previously, 7 of the original 9 clinics were supported by the UMWA funds; also, 17 percent, or 304,000 West Virginians, are UMWA beneficiaries and as a result, have had excellent ambulatory medical coverage. Population concentrations of 60 percent UMWA beneficiaries are common in the southern part of the State, and are as high as 80-90 percent within magisterial districts. A clear relationship exists between the concentration of UMWA beneficiaries and the prevalence of nonprofit primary care clinics.

The Office of Health Services Research has data on the first-year developmental costs of 15 clinics in which the West Virginia Regional Medical Program invested funds as well as technical assistance. A variety of funding sources were used in the development of the 15 clinics between January 1972 and July 1976, including the Appalachian

Regional Commission, the Claude Worthington Benedum Foundation, and local funds. A mean developmental cost of \$255,000 was incurred to establish each clinic. During this period, the Appalachian Regional Commission, through the Governor's Office for Economic and Community Development, was a major source of primary care clinic development funds and was involved in the establishment of 30 clinics throughout the State.

Of the 63 clinics in West Virginia, 25 are National Health Service Corps sites for physicians. The number of Corps physician assignees within the State is an accomplishment to be compared with neighboring States. Pennsylvania has a rural population more than three times the size of West Virginia, but West Virginia has 31 NHSC physician assignees and Pennsylvania has 30. Kentucky, with a rural population 1½ times that of West Virginia, has 10 NHSC physician assignees. Thus, West Virginia has a significantly lower rural population to NHSC physician assignee ratio.

West Virginia is heavily dependent upon foreign-trained physicians for the delivery of primary health care. Many of the clinics could not have opened if the primary physician manpower had not been greatly expanded by the influx of foreign medical graduates during 1972-75. Statewide, FMGs make up nearly one-third (32.6 percent) of the primary care pool. This contribution is especially true in West Virginia, since FMGs make up more than one-half of the primary care pool in 11 of the 37 health service regions defined by West Virginia's Office of Health Services Research.

Region III of the Department of Health, Education, and Welfare, Bureau of Community Health Services, has been an excellent catalyst in the development of rural primary

Figure 2. Primary care clinics in West Virginia before January 1, 1972

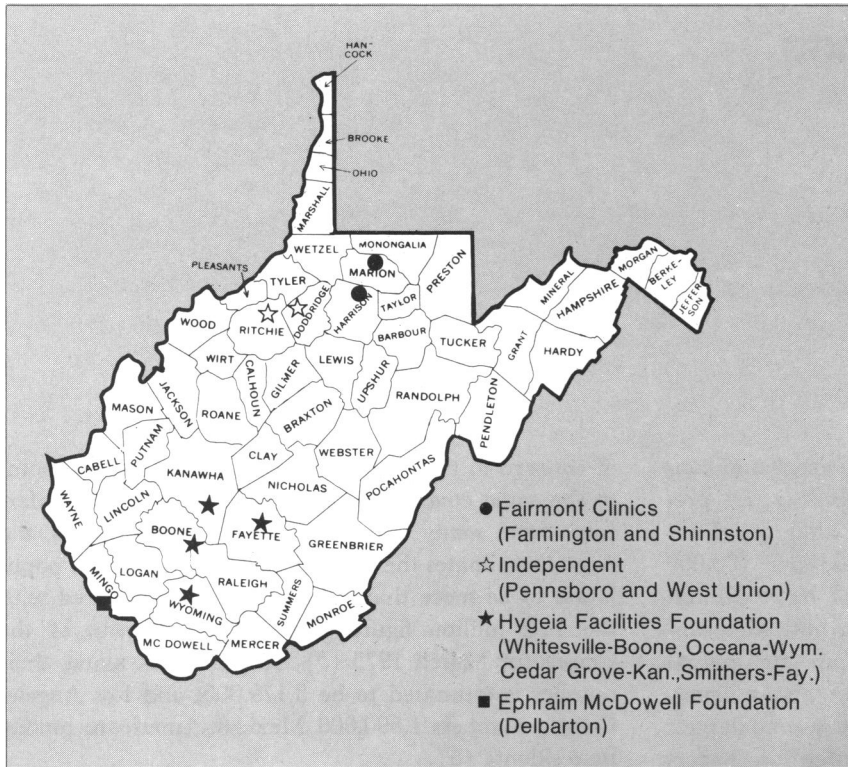
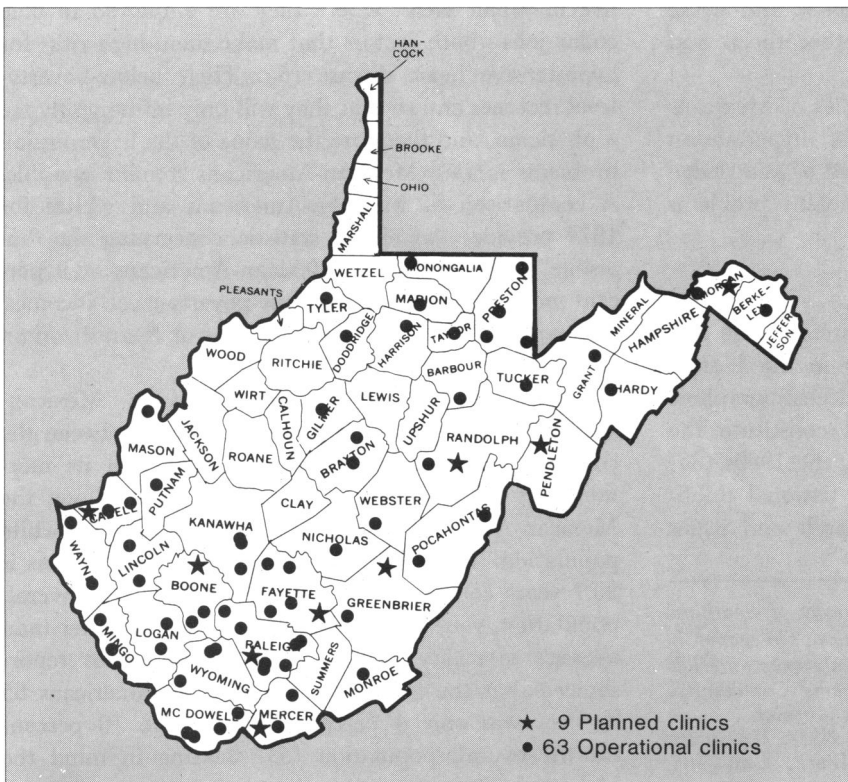


Figure 3. Location of operational and planned primary clinics, West Virginia, August 1978



care centers by the promotion of the Rural Health Initiative (RHI) throughout the State. In 1978, 4 Health Underserved Rural Area projects and 17 RHI projects were serving both critical health manpower shortage areas and medically underserved areas. The Bureau of Community Health Services is a lead agency in the development of primary care, replacing the Appalachian Regional Commission's role as the prime funding source.

The clinic management systems have been and are important to the rational development and responsible management of primary care clinics. Clinic systems exist where there are formal relationships between a central clinic and satellite clinics. Such systems have the capacity to provide more resources for their communities than the solo clinic operation. Optimally, such systems create linkages for continuity of care for the rural patient. There are exceptions, but in general, clinic systems can overcome two of the most severe problems of primary care clinics—small clinic size and clinic isolation.

### Comment

All these factors have contributed significantly to clinic development. The most important factor, however, has been the availability of Federal funds. Before January 1972, only nine nonprofit primary care clinics had evolved since 1955. After Federal funds became available, 54 clinics were established within 8 years. Recently, these clinics survived two severe winters, some disastrous spring floods, and the collapse of the principal source of third-party reimbursement, accompanied by a record strike. None of the clinics have been forced to close. In fact, several others are under development. These clinics represent a major source of primary health care for rural West Virginians.